Belzona protects cooling water pump's impeller from cavitation in nuclear power plant

ID: 9060

Industry: Power Customer Location: Krško

Application: CEP-Centrifugal Pumps Application Date:

Substrate: Stainless-steel

Products: Belzona 1111 (Super Metal), Belzona 1341 (Supermetalglide), Belzona 2141 (ACR-Fluid Elastomer)

Problem

At the end of planed overhaul, severe cavitation was detected on one of the main cooling pumps.









Cavitation damage

Rebuilding the damaged surface

Coating the surface

Finished application

Application Situation

Belzona distributor stepped up with a cost effective solution that would rebuild and protect the pump from further cavitation while providing efficiency enhancement to the pumps impeller. The repair and protection was completed in 4 days.

Application Method

The pump's impeller was grit blasted according to standard stated in the instructions for use.

Cavitation damage was rebuilt to profile with Belzona 1111.

Whole surface was protected with efficiency enhancement protective coating Belzona 1341.

Cavitation impact zones were coated with Belzona 2141 elastomer that can withstand cavitation.

Belzona Facts

There was no time for replacement and welding was not an option for it would distort impeller's hydrodynamics. Belzona saved the nuclear power plant company from additional downtime which would result in costly problems.

